

# How The Ant Killed Little Baby Ruth

Newly Discovered Menace of  
the Little Argentine Pest  
Which Crawls Into  
the Ears, Lays Its  
Eggs and Sets  
Up a Brain  
Infection That  
Brings Death



Little Ruth Jones, Whose Death Was  
Caused by an Argentine Ant  
Laying Its Eggs in Her Ear.

NOT long ago little three-year-old Ruth Jones, whose father is a well-to-do farmer near Bigheart, Oklahoma, complained of pains in her ear and head. It was thought that she had some childish ailment, but later as the symptoms grew worse a doctor was called in who diagnosed the case as meningitis. The baby died within a few days.

There were many curious features of the illness that determined Farmer Jones to have an autopsy made.

When this was done it was found that little Ruth's death had been caused by an Argentine ant!

The ant, an egg-laying female—a queen ant—had crawled into the outer ear of the baby, had bitten its way through the ear-drum, passed into the inner ear, and had laid its eggs against the membrane, close to the mastoid bone. It had died there and some of the eggs had hatched. An infection had thus been set up which first affected the mastoid bone and then passed on to the brain, causing an inflammation which had resulted in death.

Soon after the report of little Ruth's death was made to the authorities other cases of mysterious deaths among children, and even adults, in regions infested by the ant came to light. The Bureau of Agriculture in Washington sent investigators into the Southwest, and as a result of their discoveries warnings have been sent broadcast over the parts of the country where the tiny pest has found lodgment, and a real war for its extermination has been begun.

An eminent New York medical authority, who has met with a somewhat similar case in his own practice, explains just how the ant caused the little girl's death.

Before giving his explanation, however, it is necessary to know something about the structure of the human ear.

The ear is divided into three parts and—in anatomical language—they are called the outer, middle and inner ear. Only the first two are considered here, as the inner ear, a highly complex mechanism, is not concerned in the case under discussion.

The outer ear is made up of the expanded portion that projects from the head—ear flap it is sometimes called, and the outer auditory canal. This last is simply the passage with which every one is familiar, the tube into which we sometimes stuff cotton.

The middle ear is known as the tympanic cavity. Tympanum means drum—and that is just what the middle ear is—a drum, although when we say ear-drum we mean the membrane that is stretched across the opening between the outer and middle ear.

Behind this ear-drum is the hollow space that corresponds to the shell or body of the drum.

It is really a hollow space in that bony portion of the skull known as the mastoid—so called because it is full of air spaces

or cells. On the upper side of this bony structure is part of the brain.

In very young babies the upper wall of the middle-ear cavity is sometimes entirely absent. This is occasionally true of young children. This means that only the "dura mater," or fibrous outer covering of the brain interposes between the middle-ear cavity and the brain itself. And even if the upper wall is present it is extremely thin. Not only that, but the whole mastoid process—the bone that separates the inner ear from the brain—is not developed. There are three separate bones that make up the mastoid process, and in a child these are not united except by a thin membrane—which is lacking in spots.

The ear-drum of a child, the first obstacle which the ant would meet, is not very tough or thick, as in an adult. It is composed of three layers—thin skin, connective tissue and mucous membrane. The New York specialist does not believe that the ant can get into the baby's brain. It might possibly get as far as the outer covering of the brain, but even that is hardly probable, nor would it be necessary in order to cause death.

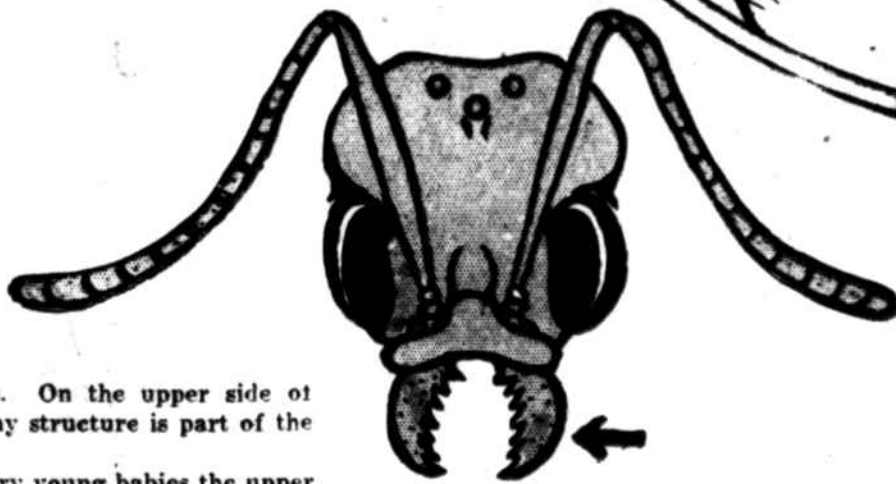
The ant that killed little Ruth crawled along the outer ear passage until it came to the ear-drum, which it penetrated. In the middle-ear cavity the ant laid her eggs. This set up an infection which spread through the thin, unjoined bones of the upper wall of the middle-ear cavity and infected the "dura mater," finally reaching the brain and causing meningitis, from which the baby died.

It so happens that the passages in the human ear are singularly like the labyrinths in an ant hill, so that the little pest would find itself right at home in boring through and living in the human ear.

It would also have every advantage in attacking a baby or young child whose tender membranes and incomplete bone structure would be unable to withstand the cutting jaws and whose age would prevent giving a sufficiently good account of the pain and infection to helping the doctor in his treatment.

Diagrammatic Illustration of How the Ant Killed Little Ruth Jones.

(A) Shows the Outer Ear With an Ant Crawling to the Ear Drum (B). Cutting Through This Membrane It Proceeds Through the Canals of the Ear to (C) the Wall of the Middle Ear, Where Its Eggs Are Deposited and an Infection Results Which Destroys the Thin Mastoid Bones (E) and Passes to the Brain (F), Causing Death. (D) Is the Semi-Circular Canals of the Ears Into Which the Ant Also Sometimes Makes Its Way.



Greatly Enlarged Head of the Argentine Ant Queen, Showing the Destructive Cutting Jaws.

Since the discovery of the death of this child in Oklahoma information has reached this country that Professor Harold Maxwell Lefroy, the distinguished entomologist of the Imperial College of Science in London, England, has been fighting the Argentine ant in England.

Circulars explaining the danger of the spread of this pest have been sent broadcast in England and our own Bureau of Entomology, at Washington, has also distributed warnings in the Southeastern portion of the United States, where it appears the ants have again obtained a foothold and are threatening to take up a drive into the northern part of the country. It is thought quite likely that the ant obtained a start on our southern border through shipments arriving in New Orleans from European ports.

The work of stamping out this pest has been taken up by the United States Government agents after Professor E. R. Barber, assistant at the Bureau of Entomology of the Department of Agriculture at Washington, had made investigations in the Southern States.

Professor Barber paid particular attention to the attacks of these ants on babies and discovered that they occur "in such numbers as to cause serious results, and that reports of the death of infants had been carefully verified."

In asking the British Government for funds to repress this pest Mr. A. E. Moore,



A Section of the Passages in an Ant Nest Whose Curious Similarities to the Labyrinth of the Human Ear Causes, It Is Supposed, the Ant to Mistake the Latter for a Nest and Enter to Lay Its Eggs.

honorary director of the Vermin Repression Society, made this statement: "The Argentine ant bites its way

wonderful sense feelers and sharp cutting jaws by which it is able to burrow into many tough substances. They have

through the tympanum in the ears of sleeping individuals until it reaches the brain and kills its victims."

And Professor Lefroy said:

"I do not want to alarm the public unnecessarily, but the Argentine ant is one of the most dangerous pests in the world. It will eat anything we eat."

"The plague has come to England in a case of tomatoes or bananas from Madeira. The varying temperature of our normal Summers have up to date kept us immune from Argentine ants, but the heat of last year and this year after a slow start has enabled them to gain a firm foothold. If their inroads are not checked they will be the horror of the housekeeper."

As a rule, they nest behind furniture or wall fixtures. The best means of getting rid of them is to smear their nesting places liberally with a mixture of paraffin oil and lubricating oil.

It appears, according to the best authorities, that the Argentine ant landed in Spain in 1917 and in England in 1918, and since then has spread with alarming activity.

The Argentine ant in both blind and deaf, but has

been known to burrow a hole in wood in order to get at food. The tender skin or bone of an infant inside the skull would be easy for them.

The ants have cost New Orleans millions of dollars. Louisiana, which grows our most delicious oranges on the rich lands of the Mississippi delta, has already suffered a loss of a half million dollars in fruit and many million dollars in sugar from the ants, while Texas and other Southern States report that the plagues of Egypt were puny as compared to the destructive activities of the Argentine ants.

These ants got into New Orleans in cargoes of coffee, and got spread about by the distribution of coffee. Obviously, they got into Europe in the same manner.

New Orleans people devised peculiar methods to prevent being bitten by the ants. These methods have become generally adopted. Panes of glass were put under bed legs and covered with vaseline. Structures were abandoned, while all entrances were sealed and every room thoroughly impregnated with the fumes of hydrocyanic acid, a deadly poison gas.

Kerosene oil sprayers were used. Sponges, saturated with sweetened water, were placed about, attracting hordes of ants, which were then killed in boiling water. Dishes filled with olive oil were set about, the invading ants filling them and drowning themselves in mad struggles with each other. A year of such and other struggles in New Orleans against the invaders cost 75,000 houses \$5 each for food destroyed by the pests. The products of the city truck gardens destroyed are scheduled at \$300,000, and the cost of poisons used at \$200,000.

The ants, having effected an entrance to a structure, increase in numbers until they have established a patrol throughout it. Detective ants seek out the edibles of every description and report to headquarters. Having planned a campaign, like any good burglars, they proceed systematically to wipe out the edible contents of the house in a night. Eternal thousands of the tiny creatures swarm in and devour meats and fish, sugar, candy, candles, eggs, cream, milk, lard and whatever is exposed or which they can expose to consumption. The cold of refrigerators does not daunt them in the least. They take ice as a matter of a night's job. Wrapping paper, around meats, etc., have folds through which they enter with ease. They follow spiral threads of glass jars, go inside and get exceedingly busy with jams, jellies, honey, fruits and whatever the housewife has jarred.

But the newly discovered menace to life in the Argentine ant puts it in the front rank of our insect enemies.

A Drawing of the Argentine Ant Enlarged About Fifty Times.

